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## CLIMATE, RAINFALL AND PRODUCTIVENESS.

Mr. Massey—who, had he lived in Roman days would have aspired to be Cato, the Censor; if in Homeric days, Thersites; or in early days an Ishmael—thinks he has proven his point. If he had have consulted the Statistical Atlas of the Census of 1870, prepared under Prof. Brewer, of the Sheffield Scientific School, by direction of F. A. Walker, then Census Superintendent, now President of the Massachusetts school of Technology, his reason might have possibly been convinced that these things were worth notice. On plate 11 there are eight tables giving "Area, rainfall corn and wheat production." The first extends from Maine to the East side of the Chesapeake bay; an area of 135,000 sq. miles; rainfall 41 inches; corn, 54,355,000 bushels; wheat, 24,839,000; 355 bushels of corn to the mile, and 183,000 bushels of wheat. The second extends from the N. W. boundary of Maryland to Florida. Area, 189,000 miles; rain 45 inches; corn 56,372,000; wheat 16,818,000 or 498,000 bushels corn, and 88,000 bushels wheat to the mile. The third extends from Western Georgia to Western Mississippi, area 145,000 miles; rain 52 inches; corn, 32,240,000; wheat 2,154,000 bushels; 229,000 bushels corn, 14,000 bushels wheat to sq. mile. The fourth embraces western Pennsylvania to the mouth of the Ohio, and Northward nearly to the great lakes, area 207,000; rain 43; corn 231,917,000 bushels; wheat 87,313,000; corn 1,120,000 to mile, wheat 326,000 to the mile. Fifth, from the Missouri river to the gulf of Mexico, a strip on both sides the Mississippi on the East side embracing a portion of Kentucky, Tennessee and Mississippi, area 66,000; rain 50 inches; corn 31,334,000; wheat 3,247,000 bushels; corn 474,000 bushels, wheat 49,000 to sq. mile. Sixth: A long stretch on both sides of Mississippi, from nearly the mouth of the Ohio to Lake Superior. Area 179,000; rain 34 in; corn 193,221,000; wheat 95,163,000; corn 1,023,000 bushels to mile, wheat 531,000 bushels to sq. mile. Seventh: Then there comes a large stretch of territory, on both sides of the Missouri river, and running North West to the British possessions. Area 527,000 sq. miles; rain 18 inches; corn 77,187,000 bushels; wheat 15,533,000; or corn 146,000 bushels, wheat 29,000 bushels to square mile. Eighth, A stretch of country on both sides of the Arkansas, running West. Area 184,000 miles; rain 28 inches; corn 14,940,000 bushels; wheat 1,

933,000, or corn 81,000 bushels to the mile and wheat 10,000.

We tabulate the whole thus:

1.41 inches.....	{ Corn, 403,000 Wheat, 183,000
2.45 inches.....	{ Corn, 298,000 Wheat, 88,000
3.52 inches.....	{ Corn, 229,000 Wheat, 15,000
4.43 inches.....	{ Corn, 120,000 Wheat 336,000
5.50 inches.....	{ Corn, 474,000 Wheat, 49,000
6.34 inches.....	{ Corn, 1,023,000 Wheat, 531,000
7.18 inches.....	{ Corn, 14,600 Wheat, 29,000
8.28 inches.....	{ Corn, 81,000 Wheat, 10,000

Now these tables were compiled by scientific men of long experience, and of national reputation for a purpose. The Smithsonian Institution, under the guidance of Prof. Henry, had for years been collecting rainfall and temperature data for various purposes, especially with reference to their bearing on crop growth. Two maps, temperature and rainfall were compiled under Prof. Henry's immediate superintendence. These men apply them, and the result is here given. Their reputations were at stake before, not only the general public, but the scientific world. Could they afford to print in a census report anything calculated to mislead or deceive?

If Mr. Massey had read all the articles he would have seen that it only spoke of soil, temperature, climate, rainfall, as subjects worth consideration, not that they would make poor land rich, or supply deficiency of manure and culture. The only writer about them as subjects little noticed in the Agricultural press, and as such perhaps, new. He only claims to be a plain farmer, and deeply regrets that neither his early education, nor his pursuits have been such as to make him either an expert in or a professor of any science connected with farming, as chemistry, botany, horticulture, veterinarian or any other. X.

## COUNTY FAIRS SHOULD BE SUPERSEDED BY A STATE OR INTER-STATE FAIR.

Prof. Thomas D. Brunk, of the Maryland Agricultural College sends us the following views on this subject. His suggestions are worthy, at least, of attentive consideration.

What is a fair and what are the main results that should be reached? This double question would not be answered quite the same by different individuals having different tastes.

Some would say it is a place to have a grand picnic and a 'good old time' where friends and relatives can be met and old times and reminiscences discussed; a place to see the fashions, to see the side shows, to make money at wheels of fortune; others would assure us it is the place to test the speed of some fancy roadster, or rather not to test such an animal in full, but to regulate the speed to fit the betting rings; others still believe it to be simply a place to gather in the common and uncommon products of the surrounding neighborhood for mere competitive comparisons, without any special thought of educating the rising youth in the choice of better breeds or varieties. Still others use such places and the often liberal premiums offered to gain the filthy lucre by going from county to county and State to State with a fancy exhibit carefully selected and arranged.

quite surely a certain number of premiums. Such 'highly-colored' shows come directly in competition with the honest and less fancy farm products, and the result is that the honest exhibitor goes home with his worthy exhibits, without premiums justly due him, discouraged and disgusted.

I ask the careful reader, the student of our rural affairs, the political economist, are these the narrow and ridiculous limits of our fairs? Dare I say that some of our county fairs have been almost within these narrow confines? But let us see what a fair should be and can be if properly managed, and what results could well be expected from it.

In the first place a fair should be far more a place of business than of pleasure. It should be a place to advertise property that cannot be so effectually brought before the public in any other way or brought to the notice of those who seldom go beyond the lines of their farms or the little village near by. The farmer wants a place where he can observe most anything used in the household or the field that will improve his methods of work and living, and thereby make him a happier and better citizen. This means that the distant manufacturer and merchant the breeder of special breeds, the inventor, the nurseryman, the seedsman, the florist, the scientist and all connected with the progressive steps of advanced agriculture must be attracted by some legitimate means to make exhibits of their latest and best products. A fair is a good place to make competitive exhibits of farm products, but they should be arranged with special reference to their educative influence, and not

merely for the purpose of taking a premium of a few dollars or cents. The educative feature of a fair should at least be co-equal with the purely business side of it.

These two leading objects can never be attained except to a very limited extent by our ordinary county fairs as they are usually managed. In the first place, the stockholders of these institutions are almost as numerous as the prominent farmers of the county, which makes true the saying 'What is everybody's business is nobody's business.' Much advantage and many privileges are assumed and enjoyed by these many owners of a few shares of county fair stock. They all feel that it is a common home enterprise and that there will be little of interest to them outside of having a visit with old friends and seeing a few races. Only a few do the work and the rest

are mere tools of visitors on their free family tickets. The result is that the fair attracts but few from outside of the county, but fakirs, dime showmen, etc., and the gate receipts compared with the actual attendance is quite small. Premiums go unpaid or are paid at a per cent. discount. People and exhibitors go home vowing they will never attend another county fair.

The second cause that tends to work failure in the county fair is that there are too many for so small an area of territory. They so conflict with each other by meeting the same week that they cannot all be well patronized. This year there were three in one week, two of them not being over forty miles apart.

The third and probably the greatest cause which acts against the county fair is that it is too small an affair to attract exhibits from large firms who would make grand educational as well as interesting exhibits, or to justify the managers in spending money on attractive features that would draw a large attendance. A show of proper merits and size never failed to attract crowds to witness it. Therefore, I would urge that the State of Maryland, or Delaware, Maryland and parts of Virginia unite forces and have an inter-state exposition, to be located at the largest and otherwise most attractive city in the territory. Let the exposition grounds and buildings belong to a small company or corporation of experienced business men of means and interested in the development and progress of the State.

Let this company study their own interests and those who would be benefitted by the enterprise. The more profit to the company the greater the benefit to the patrons.

The city of Baltimore is amply able to espouse such a cause as this, if for no other purpose than to advertise its own great merchants, manufacturers, varied agricultural interests and real estate. Let an area of two hundred acres or more be fitted up with all the modern accommodations for large gatherings of people, with a mammoth wooden building for indoor exhibits, and a nicely laid out campus about it, with fountains and flowers, graceful trees and beautiful shrubs, walks and boulevards, a great machinery hall, with a central power, with ample space to be given to counties that have pride enough in their reputation to put up buildings for their separate county exhibits, ample space for camping, that people from a distance may live on the grounds for a fortnight if they desire, in tents. A mile track, a large amphitheatre, a mile of stalls, and everything painted and dressed in the most pleasing style, and who can predict the good results? Manufacturers of all kinds of farm machinery and vehicles and materials will come from Chicago, New York and every part of the country and make superb exhibits of the very latest designs and improvements in their wares, and thus enable the visitor to become familiar with contrivances and improvements he in no other way would be likely to see. Our large importing and manufacturing merchants of household goods, harness, groceries, furniture, dry goods, crockery and a hundred other lines, all of importance at such an exposition, would make liberal and imposing exhibits, such as could not be seen even at their places of business, and competitive county exhibits could be secured that would awaken the most earnest efforts.

The writer has witnessed the results of such exhibits and can testify that they are the most successful means of awakening home pride and eliciting energetic effort to display the products of various kinds, native and cultivated. The premiums offered are usually \$500 for the best exhibit of a county belonging to a district of a State having the same elevated and climatic and soil conditions; \$300 for the second best, and \$150 for the third best, providing six counties make exhibits from that particular district; otherwise the best exhibit would receive but \$300. These county competitive exhibits can be placed either in the main hall or in tasty buildings erected by the counties themselves. Of course they do not include live stock, but they do include every product of the farm and all natural resources of a county, with some manufactured articles.

Who will dare say that these competitive exhibits, including articles named in a schedule of points, would not create more interest and pride in a county's welfare than any common, old-fashioned county fair? Who will dare say that such an exposition, with all of its varied and laudable attractions, will not have an attendance greater than all the county fairs of the State put together? Who can say that such an exhibition will not rebound to the credit of the State and be the means of producing a lasting benefit to the producers of the State? Who can

say it would be a financial failure if managed on business principles?

Let us begin now to talk over this matter while the results of our fairs are fresh in our minds, and start the interstate exposition ball rolling in ample season for another year, that all may begin soon to prepare for it. Why is it that people go West to seek cheap lands when they can be had for as low as a dollar and a half an acre in this State, at the doors of the best markets in America? Simply because people do not know the soil capacity or nature of crops that can be profitably grown upon these lands. A State exposition where the various counties would be arrayed against each other, with all their products, natural timbers, soils and minerals, would be a great eye-opener.

The great Piedmont Exposition, of Atlanta, Ga., and the Dallas State Fair and Exposition, of Dallas, Texas, have been the most potent factors in showing the resources and capabilities of the great Southern regions in which they were held. May we not follow their splendid example?

#### ABOUT PINES.

I am glad to see that my jocular punch in the ribs has set "X." to reading up on the botany of the Pine tree. But he is yet sadly mixed, and I beg his pardon if I am compelled as he says to "show my knowledge" by setting him straight. Prof. Vasey may said said, as he quotes, that the "several varieties of pine grow in Wicomico," but he only meant the several varieties of the latitude and region. "X." knows very well that he did not mean that all the varieties of pine grow in Wicomico or anywhere else. If Dr. Vasey says that he knows that *Pinus Australis* or *palustris* is found in Wicomico I should be obliged to believe him, for he is a competent botanist. But he will say nothing of the sort for it is well-known that it is not there. "X." will find in Wicomico *Pinus mitis*, the Yellow Pine; *Pinus rigida*, the Pitch Pine; *Pinus taeda*, the Loblolly Pine and *Pinus inops*, the short leaf or Jersey Scrub Pine; and if my memory serves me right, he will find no other pines there, indigenous. The Loblolly pine is found all over the South, from Maryland down, and in the upland country of the South the Jersey Scrub and Yellow Pine are also found. *Pinus Pungens*, the Table Mountain Pine, of which he inquires is one of the most restricted of all pines in its distribution. It is found nowhere but in the mountains of Virginia and North Carolina, its northern limit being about Charlottesville, Va., and its most plentiful locality on the mountains around the Linville valley in Mitchell county, N. C.

*Pinus Palustris* is merely a synonym of *Pinus Australis*. This is the true long-leaf pine, and it is confined the coast country of the Southern States from North Carolina to Florida. It is not found in the Piedmont or mountain sections of North or South Carolina. The lumber of this tree resembles in a general way the short-leaf yellow pine of the Eastern Shore. Both are yellow pines, and doubtless much of

the North Carolina lumber which "X." has seen at Jackson & Co.'s yards in Salisbury was made from the same yellow pine which he is familiar with in Wicomico, as it too grows plentifully in the region where Jackson's lumber is cut, much more plentiful perhaps than the long-leaf pine. If "X." wants to see a forest of pure long-leaf pine he should take a trip into the sand hills of Moore county, North Carolina on the line of the Augusta & Raleigh Railroad, about 75 miles south of Raleigh. Here the entire growth is *Pinus Australis*. This tree in its young state has leaves a foot or more long, getting a little shorter as the tree attains age. It is the only pine from which turpentine is collected, and furnishes the best yellow pine made, or what is known in the Northern market as "Georgia pine." A great deal of lumber is made also and particularly in Wicomico from the Old Field Pine, *Pinus taeda*, which is much inferior to the true yellow pine, but answers very well for packing boxes and crates.

There are no such species of pines to my knowledge, as *elliotii*, *glabra* or *clausa*. *Pinus Resinosa* is a Northern species called Red Pine and is not found southward in the coast country, though I hear from it in the mountains of Virginia. I would suggest to "X." that in the study of Pines he avoid confounding the names of species with varieties. "A little knowledge," "X." "is a dangerous thing." If "X." will come and take a peep at my library and collection of woods he will doubtless find more species indigenous to Wicomico than he ever dreamt of being there. I would advise "X." to study the botany of Wicomico, not from Dr. Vasey or any one else, but from the fields and woodlands of Wicomico, as I did, and perhaps he may learn not only the pines, but a great many other things. He will be as likely to find a white pine wild in Wicomico as he will a long-leaf pine; in fact he will find neither the one nor the other.

Raleigh, N. C. W. D. MASSEY.

#### HOW TO FARM ECONOMICALLY.

BY THE DEER CREEK FARMERS' CLUB.

The Deer Creek Farmers' Club met October 24th, at the residence of Mr. R. John Rogers.

Before proceeding with the discussion a committee was appointed to inspect the farm. They performed their duty and reported that they found the place in first class condition. Mr. Rogers has an unusually heavy crop of corn. He has 19 nice fat cattle, having sold 10 in June last. They were small when he bought them and they have gained 400 lbs. each. He has 32 fine, thrifty young Berkshire hogs.

His arrangement for keeping poultry is excellent. A large yard, containing the requisite buildings, is enclosed on two sides by a high pale fence and on the other by an ordinary board fence, above which simple wires are stretched. Mr. Rogers considers the latter cheaper and more lasting than the high pales. His chickens, mostly brown and white leghorns, never have the gapes. His stables are clean and well kept.

His wheat was sowed when the ground was dry and came up slowly but may be thick enough.

The topic for consideration was "The Most Economical Way of Managing a Farm," and we copy from *The Aegis*.

Mr. Rogers said all farmers are interested in this question, but different views are held. At present prices it will not do to make grain-raising a specialty; on account of the expense. If you raise much grain you must buy a great deal of fertilizer and every farmer knows this is a big item in the expense account. It may pay better to feed to stock all the corn and hay grown on the place, although you may not get thereby the full market price.—The manure you get is a valuable consideration. Two loads of manure from grain-fed stock is equal to three from the barn-yard. Wheat, of course, must be turned into money, and farmers can't get along without raising it, on account of the straw, which is necessary for litter to make manure. As a general thing it would be more economical for a small farmer to feed his grain to cattle in winter, getting them off on an early market, when the price is highest. In managing a farm in this manner the outlay for labor is much reduced.

Thomas Lochary considered it a good plan to feed your corn on the place, where you are fixed for it. If a man is not a judge of cattle and can't superintend or do the feeding himself, he will lose as much at that as anything else; but if he can give personal attention to his cattle they will pay him.—There is economy in having good help on the farm. Some people waste everything they touch. Close personal attention to business is one of the greatest sources of economy.

John Moores.—Horseback and fence rail farming, which used to prevail many years ago, won't pay now. There is profit in having careful, reliable hands. A farmer should instruct his hands to be careful in even small matters and see that nothing is wasted. We must mix our farming to be successful and not make a specialty of any one thing. A farmer should always have something to sell, a horse occasionally. Cattle and pigs are most important. The Irishman says "the pig is the gentleman who pays the rent." The Scotchman says the sheep pay the rent. A nice little profit may be made from the dairy and poultry yard. The latter, especially, has been profitable for several years past. It is not so much the amount a man makes as the manner in which he takes care of and disposes of the proceeds which makes him independent.

R. Harris Archer thought good help is all important. The man who is trusty and careful is worth more money than the careless, inefficient hand.—Many farmers have too many horses on their farms. Almost any farm in this county could be farmed with two or three horses and a yoke of oxen. Then again, while it is pleasant to have all kinds of labor saving machinery, it is often expensive to buy them all and to protect them from the weather. If a man has not everything in the market he can get along

with less than might be supposed. For instance there is no use in every farmer having a binder, a wheat drill or a corn drill. One of each of these would do for several farms.

Mr. Rogers said his experience in this direction was that it is not safe to depend upon getting a wheat drill from some one else. A delay of a few days in seeding sometimes makes a great difference in the crop.

John B. Wysong said men on small farms who do their own work and don't buy too much commercial fertilizer get along best. On a large and fertile farm a man must spend a great deal for labor. He considers mixed husbandry the best.—The little things on the farm add to the farmer's income. A man to farm economically should raise stock and poultry, have a good garden, buy as little as possible and pay cash for what he buys. If he can't pay cash let him go without. If a man has land in condition to bring good pasture he should raise no more grain than is necessary for his stock. There is profit in a small bunch of sheep but not on large flocks.

Edward P. Moores said that it was an old aphorism that "He, who by the plow would thrive, himself must either hold or drive." If a man wants to make a living at farming he must take off his coat and go to work. As to reliable help, as soon as a man finds he knows how to manage a farm he naturally wants to manage one on his own account.

Edward Swartz said to farm economically requires strict attention to business and hard work and the labor we have is a poor dependence.

Jas. W. Hanna, said economical farming consists in taking care of the little things and keeping your money when you get it.

Wm. D. Lee.—As a general thing there is a great deal of waste among farmers. They leave expensive machinery and tools in the weather, to be destroyed, while at the same time trying to practice economy in little things. A farmer should buy nothing he can do without. Several farmers might join in getting expensive machinery.

Speaking of wheat fans Mr. Archer said it was useless for a farmer to own one, for he can haul his wheat to mill and have it thoroughly cleaned for a small price; less than interest and wear and tear of a machine of his own.

Mr. Rogers said his experience in hiring machinery to other people was that unless you use it yourself it is likely to be destroyed.

James F. Kenly, the President, said the most economical way is to keep the farm in grass as much as possible and have all the cattle you can pasture and feed. The largest sums paid out on the farm are for labor and fertilizers. This can be lessened by the plan he proposed. A farm of 250 acres should be so managed that only one field is plowed every year. This would require only three or four horses and a yoke of oxen. All the hay and corn should be fed on the place and only the wheat hauled off. With only one field to plow not a great deal of fertilizer need be bought. Where a farm is adapted to grazing there is no more economical way of farming.

John Moores argued that grazing exclusively would not do for small

farms the profit per acre being too small. He estimated that the average profit per steer is \$24. It takes three acres of ordinary grass to fatten a steer. Deduct \$2 from the profit of each steer for interest and risk and you will have left a profit of about \$7 per acre.—On a 60 acre farm this would be very little. He concluded that diversified farming would be more profitable.

Mr. Kenly thought the manure ought to be taken into consideration as one item of profit. He added that he would not advise any farmer to give his whole attention to grazing but thought a system of general husbandry would be safer. At the same time grazing keeps up the fertility of the soil and divides the work throughout the year. The majority of farmers neglect little things. They say "I have not time to attend to that now." They have no idea how much they lose by this want of prompt attention to the little details of their business.

The next meeting of the club will be held on November 14th, at the residence of F. W. Baker, in Bel Air. The topic selected for discussion is: "How Can Farmers Best Promote the Comfort and Happiness of the Ladies of their Households?"

#### STORING VEGETABLES FOR WINTER USE.

Squashes and pumpkins should not be touched by the frost; they will not keep if they are. They should be taken in early, leaving a portion of the stem attached, and placed on shelves in a perfectly dry room that is frost-proof. In this manner they will keep in good condition for several months.

Beets, radishes, turnips, carrots and horseradish should be taken up early in November, always deferring the work until there is danger of the ground's freezing. For the wants of a small family, sufficient of one kind can be kept in a box two feet square and a foot in depth. First, put in clean sand or soil to the depth of two inches, then fill the box with roots nearly to the top, and fill with sand. The roots should not touch the box at the sides more than at the bottom, and there should be at least two inches of sand over the roots, which will exclude the air and keep them fresh.

Cabbages should be pulled up by the roots and buried in trenches, roots down. Pack them close together in the trench, three heads in width, making the center row of heads a little higher than the side rows, cover with soil to the depth of a foot, and after the ground is frozen cover with corn stalks or straw, which prevents alternate freezing and thawing, and at the same time will allow of their being taken out as required.

In taking up roots of all sorts great care should be exercised not to break or injure them in any way, as mutilation of this kind not only causes decay but injures, if not destroys, their best edible qualities. This is a more important matter than is generally supposed, and the pulling away of vegetables in a careless or indifferent manner has led many to think that vegetables are of little value in winter.—*American Agriculturist.*

#### FOOD VALUES.

It is one thing to raise profitably large crops of grain and grasses; it is a very different thing to feed them so that each pound may produce the greatest possible amount of good, whether fed to growing, working, fattening, or idle animals, or to fowls. It is in the intelligent use of foods and their proper combination that not only exists profit, but health. Thousands of animals die every year literally and actually burnt out by the lavish use of heat-producing foods, i. e., those that had too much of it and too little of the flesh and fat-forming quality, so that to get at the latter, food had to be given in excess, thus producing a feverish excitement of system with all its attendant dangers. If to these we add that the digestive and assimilative organs of no two animals of the same breed are alike, we see at once how the farmers' troubles increase, for nothing but constant, close observation will enable them to see and

avoid these difficulties. Add to these that grasses owe their value largely to the stage of maturity at which they have arrived when cut, and our fodders, also, and we see at once that these essentials are complex, requiring judgment and observation on the part of the feeder. Then comes in the climate of the section, its heat, cold, rains, snows, and the amount of protection to be given the animal. Thus, in Texas, cattle are best fattened after dehorning them in open sheds, a thing unheard of in the North.

Outside of these questions comes the other, whether to sell on the hoof at home, or to ship.

Returning to the subject, it is proper to state that the Experiment Station Record, published by the Agricultural Department for July, 1891, contains the most valuable table of the food value of some, if not all, the materials used for this purpose. From that we extract a few of those articles most usually fed in Maryland.

The analysis are for "fresh, or air dried material," and represent an average article:

	Water, per cent.	Nitrogen free Extract, per cent.	Crude Fibre, per cent.	Protein, per cent.	Fat, per cent. . .
Corn Fodder—Flint Varieties.....	79.8	1.9	2.0	4.3	12.1 0.7
Kernels Glazed.....	77.1	1.1	2.1	4.3	14.6 0.8
Corn—Dent Varieties.....	79	1.2	1.7	5.6	12.0 0.5
After kernels had glazed.....	78.4	1.5	2.0	6.7	15.5 0.9
Sweet Varieties.....	79.1	1.3	1.9	4.4	12.8 0.5
Leaves and husks cut green.....	60.2	2.9	2.1	8.7	19.0 1.1
Striped stalks cut green.....	76.1	0.7	0.5	7.3	14.9 0.5
Corn Fodder—Field cured.....	42.2	2.7	4.5	24.8	34.7 1.6
Corn—Leaves field cured.....	31.0	5.5	6.0	21.4	35.7 1.4
Corn Husks—Field cured.....	10.9	1.8	2.5	15.8	28.3 0.7
Corn Stalks—Field cured.....	68.4	1.2	1.9	11.1	17.0 0.5
Timothy.....	18.3	4.4	5.9	29.0	45.0 2.5
Cut in full bloom.....	15.0	4.5	6.0	29.0	41.9 3.0
Soon after bloom.....	14.2	4.4	5.7	28.1	44.6 3.0
When nearly ripe.....	14.1	3.9	5.0	31.1	43.7 2.9
Orchard grass.....	9.9	6.0	8.1	32.4	41.0 2.6
Red clover.....	15.3	6.2	12.3	24.8	38.1 3.3
In bloom.....	20.8	6.6	12.4	21.1	33.8 4.5
Alsike clover.....	9.7	8.8	12.8	25.6	40.7 2.9
Lucerne.....	8.4	7.4	14.3	25.0	42.7 2.7
Wheat straw.....	9.6	4.2	3.4	38.1	43.4 1.3
Rye straw.....	7.1	3.2	3.0	38.9	46.6 1.2
Oat straw.....	9.2	5.1	4.0	37.0	42.4 2.8
Corn Kernel—Dent.....	10.6	1.5	10.3	9.2	70.4 5.0
Flint Kernel.....	11.3	1.4	10.5	1.7	70.1 5.0
Oats.....	11.0	3.0	11.8	9.5	59.7 5.0
Rye.....	11.6	1.9	10.6	1.7	71.5 1.2
Wheat—Spring Varieties.....	10.4	1.9	12.5	1.8	71.2 3.2
Winter Varieties.....	10.5	1.8	11.8	1.8	72.0 2.1
Soya bean.....	10.8	4.7	34.0	4.2	28.8 1.60
Cow pea.....	14.8	3.2	20.8	4.1	55.7 1.4
Sorghum seed.....	12.5	2.1	9.1	2.7	69.8 1.8
Corn meal.....	15.1	1.4	9.2	1.9	68.7 3.8
Corn and cob meal.....	5.1	1.9	8.5	6.0	94.8 3.5
Oatmeal.....	7.9	2.0	14.7	0.9	67.4 7.1
Pea meal.....	10.5	2.6	20.2	7.3	27.9 3.4
Ground corn and oats—equal parts.....	11.9	2.2	9.6	14.4	51.1 1.2
Wheat Bran—Spring wheat.....	11.1	5.4	16.1	8.0	54.5 4.5
Winter wheat.....	12.8	5.9	16.0	8.1	53.7 4.3
Apple pomace.....	76.7	0.5	1.4	3.9	16.2 1.0

A complete ration is one in which the protein stands to the nitrogen free extract as 1 to 6 and is found by multiplying the sum of fat by  $\frac{1}{2}$  and adding it to the nitrogen free extract and dividing this sum by protein. Thus, wheat bran has 4.5 fat  $\times \frac{1}{2}$ , equal 11.25 x nitrogen free extract 54.4, equal 59.75, divided by crude protein 16.1, equals 3.07, showing that the muscle forming, flesh producing elements largely predominate. And these dry tables are fitly concluded by some facts taken from the Second Annual Report of the Kansas Experiment Station for 1890 where the nutritive ratio for the maintenance of oxen is

given as 1:12; sheep, 1:8 for fine breeds; 1:9 for coarse breeds. Pigs of 50 pounds require 1:4; at one year, 1:6.5. For calves of 175 lbs. it should be 1:4.7 until two years old, when it ought to be 1:8. For fattening hogs at the commencement, 1:5.5, so that at the end it is 1:8, or even 1:10. For fattening cattle the ratio may be 1:6.5; until that is appreciable then 1:5.5, and at the end 1:6. Milk cows, 1:5.4. Horses at moderate labor, 1:7; hard labor, 1:6.

A "wide ration" is one where the difference between the protein and "nitrogen free extract and fat" is large; narrow, when it is small.

**DOES THE LATE ELECTION GIVE THE FARMERS HOPE OF IMPROVEMENT IN THEIR CONDITION.**

I ask this question of grangers and all honest-minded farmers, irrespective of party. Can your thoughts glide into a single corner of the prospective field where you find any prospect of reform that will give you a gleam of hope for the better? Are we not to judge and expect of the future what we have realized in the past, when there was nothing shown but the worst of corruption? Money, the chief ruler, placing men in power to enact laws that are for the benefit and to the advantage of men who already have more than they are honestly entitled to, and working to the injury and crushing out of existence the practical farmer, the man who is earning his living, or tries to, following the plow.

The laws of this State are made to benefit the rich and office-holders, and oppress the farmer. How many men of means pay their just proportion of taxes, or raise their voices against the squandering of our public money? *Not one.* They are fully satisfied, as they are not called upon to pay the bills. How many corporations are asked to pay their proportion toward these running expenses? None. The Bosses have learned to let them alone, fearing their sting if they got them on the right, neither capital nor corporations being willing to foot the bills of this outlandish waste of money. Where is it to come from? They have but one resource left and that is the farmer. He is required to make up all shortage. We are in that fix to-day and they don't propose we shall get out of it. Pig, calf, cow, sheep, horse, farming implements, and *all* personal property are assessed for more than they would bring if put up for sale. Real estate is assessed for from two to four times its cash value. On these assessments are our taxes levied, which amount in many cases, to more cash than is made on the farm clear of the closest living expenses. These gentlemen are perfectly satisfied with the arrangement; their moneyed friends and corporations are satisfied, and as for the farmer, he had just as well be satisfied, for his single-footed kicking don't amount to anything; and, what is more, he has at the last election approved and endorsed our way of doing business, otherwise they would not have been given a new lease of life. They all know they would have been shut out in the cold to freeze to death, had the united farmers so ordained; but you see we fellows are easily twisted around. In the first place, about eight-tenths of these farmers are after office; they are tired of farming, and the farms have long since tired of them. They think and feel in their bones, a change of business would help make a man of them and help their pockets. All their interest being in looking up an office and no longer having an interest in agriculture, they have sold out *body, soul*, and what brains they have left, and their actions, movements and speech are directed by politicians who strut about in plug hats and kid gloves, giving their directions to the blind tillers of the soil to lay waste their farms, impoverish their fam-

ilies, rob themselves and sell themselves, soul and body, for what? A promise of reward, which, unless it be a few dollars paid in hand, fails to make connection.

Grant that they did receive the reward of office, or anything, no matter how great—can a man call himself a good citizen, an honest man, a Christian, who will allow himself to be led around by the nose and by direction of the worst enemies of our freedom (the debased politician) be influenced by bribe, or with promise of reward, to use his vote and influence others to bring about or uphold a state of affairs that he knows full well is working against every man and woman of his class? That is pulling the life out of his occupation. That is pulling the life out of his farm. That is pulling the life out of his family and driving them from the farm. No, you cannot; you know you cannot; your conscience tells you, "*Guilty! Guilty!*" Your conscience tells you you have not done your duty to your Nation, to your State, and county, to your fellow farmers, nor to your families, and you have sold yourselves for a promise of a mess of potage.

There is no political party that ever did or ever will exist that will not become corrupt if allowed to have its own way. The stronger they get the more power they have; the more high-handed and debased will be their acts. They become so bold and feel so supremely mighty, they fear neither God, man nor Satan; and if they can make a gain by it, they will not hesitate an instant to wipe out a whole class of people. Then why cannot we, as farmers, use our freeman's right and power, give all politicians and parties to understand that we, the agricultural class, have run out a dead line for our mutual defence and the first individual or party that attempts to cross it will receive its political deathblow.

It has come to this; we have been worked against in the past; we can expect no better treatment in future as long as the farmer will allow himself to be controlled by any corrupt individual or party. Some farmers, and plenty of them would kick like a mule against allowing a Chinaman to vote. I'll trust the Chinaman just as soon as some of you who vote for pay or promise of reward. John would do just as you do, *sell out to the highest bidder*. The difference between you and him is, he has more honor than you; you sell or barter your liberty, your free institutions, your homes, your families, yourselves; whilst he, having no interest here whatever, sells, what to him is nothing, for money or reward.

Some of you say, you fear to trust the green German to vote. Let him fully understand what he is voting for, and I will bank on it, he will never vote against his interest or the interest of his class. You can neither hire, beg or kick him to play the fool by beating out his own brains and that of his whole class. That is more than I can say for some people who claim and are of our class. When I see men at the polls, sitting around on the fences and logs, and standing around waiting, it reminds me of the stock yards. What are they waiting for? A buyer, and

they are sold and paid for to the highest bidder before they leave. Talk about purifying and correcting the political abuses of a State or county with such a precious hard-headed outfit! As a general thing they will each do just as he pleases, and don't stop to think or care for the consequences.

That the farmers have the power to clean the trash and dirt out of any and all political parties and give us a decent state of things to live under, no sound minded man will dispute, and if it is not done by the farmers it never will be done.

No matter how much suffering or sacrifice it may cost, the farmer has it all to stand. *He is public plunder* for all classes. How long do you propose to stand it? How long before you will come to your senses and say, "I have worked for others all my life but now propose to finish out my days working for myself and family?"

W. H. G.  
*Anne Arundel Co., Md.*

**REPORT OF THE SECRETARY OF AGRICULTURE.**

Secretary Rusk, in his third annual report, estimates that the increase in the value of agricultural products over last year was will not be less than \$200,000,000. He states that during the first three months of the present fiscal year our exports in cereals alone have aggregated \$76,000,000, adding that the indications now are that the sales abroad of the surplus from our farms will, during the present year, largely exceed those of any previous year. He notes the increase by some \$28,000,000 in the exports of agricultural products during the first ten months under the present law, by comparison with the same period during the last year of the old law; but emphasises the fact that the increase is confined largely to articles not competing with home products, such as sugar, tea, coffee, etc. At the same time, he states that the change in rates has checked the importation of products which may be produced at home. He notes a decrease in tobacco from \$17,000,000 to \$6,000,000; a falling off in foreign barley of nearly three and a half millions; in eggs, one and a quarter millions; in horses, a falling off of nearly a million and a half, and a gradual decline in the imports of all live stock.

**INSPECTION OF MEAT.**

In speaking of the inspection of meat for exportation, the Secretary says. Our people demand something more than protection from communicable diseases. From being long accustomed to markets having a surplus of meats, even our working people purchase the best cuts from healthy animals, and they would not knowingly accept for food at any price the flesh of animals that were feverish from injuries received during transportation or from any other causes. In most, if not all, European countries inspectors, according to their reports, freely pass for consumption the meat or animals affected with foot and mouth disease, pleuro-pneumonia, localized tuberculosis actinomycosis, and similar diseases, which, according to the views and customs of this country, must be condemned. But all the meat for the foreign market is in-

spected the same as that designed for home consumption, and, consequently has been much more rigorously dealt with than is the meat produced in the countries to which it is shipped. In this respect, as is others, we have met the objections which have been raised to American products, and have not only removed the cause, but have gone beyond what was asked by our critics.

Up to the first of October there had been a total of 1,016,614 animals inspected, both before and after slaughter; there were 63,672 carcasses of hogs examined microscopically, and the total number of animals condemned and sent to the fertilizing tanks was but 1,976. The cost of the work has been within the anticipated limit, and is being considerably reduced as the word proceeds. Secretary Rusk says: I am of the opinion that the inspection of animals, and their marking for identification, may be accomplished for a sum not exceeding three cents per head, and that the cost of microscopic inspection of hogs will not exceed five cents per animal.

The benefits which have already accrued by the opening up of the foreign markets to pork products, the increased demand for beef products, and the re-establishment of their reputation for wholesomeness and soundness in the markets of the world, together with the protection which this inspection furnishes to our own consumers, amply justify a liberal appropriation."

He estimates that the losses to our pork raisers during the past ten years, owing to the prohibition by foreign countries aggregating over \$260,000,000. Pleuro-pneumonia he regards as quite under control and limited in territory to two or three counties on Long Island and in New Jersey, over which a thorough guarantee is exercised. Inspection by American veterinarians of cattle lauded in Great Britain has continued, as well as the inspection of each animal before shipment.

Since the beginning of this work there have been inspected altogether up to March 1, 1891, 326,519 head of animals. A very slight decrease in the number of cattle expected is noted, which is attributed to the increase in price, cattle bringing in June, 1891, from \$1.25 to \$1.50 per head more than in June, 1890. The inspection of imported animals has been rigidly maintained. The result of the inspection of vessels carrying export cattle has been to materially reduce the losses resulting from lack of ventilation, overcrowding and weak fittings. The total number of vessels examined since July, 1891 has been 215. The supervision by the bureau of the movement of Southern cattle has involved the separation and keeping distinct in transportation, over 40,000 cars containing over a million head of cattle. While the results of this work have been highly beneficial, he asks for further powers to enable him to compel a strict compliance with his regulations in the movement of Southern cattle.

**NO PLEURO-PNEUMONIA.**

The secretary points out the fact that for more than a year there has been no well authenticated case of pleuro-pneumonia in American cat-

the exported to foreign countries, and adds that the condition of the United States trade, and the vigilant supervision of our government justifies the strong presentation to the British government of the grievance which our cattle raisers suffer unjustly by reasons of its arbitrary regulations, enforced against American cattle, coupled with an urgent demand for their removal, adding that they have been clearly shown to be useless, and that their maintenance can only be regarded as an evidence of unfriendliness. He concludes that "justice, as well as proper self-respect, demand such a course," and adds that he shall, in the absence of the removal of such unfriendly restrictions, feel it his duty to suggest the rigid enforcement of the law, now in existence, prohibiting import into the United States of all live animals, but, at present, suspended as a matter of friendship to foreign government.

The secretary congratulates the country upon the success of the experiments in the extraction of sugar from sorghum. "There seems to be no reason," he says, "why we should not look forward with confidence to the day when the \$100,000 paid by Americans to foreign producers for sugar should be turned into the pockets of our own people." In all our efforts towards diversifying our crops, climatic conditions must play an important part, and in this connection he declares his conviction, of the importance and value to agricultural interests of the transfer to his department of the Weather Bureau, a transfer which has, he finds, been generally received with great satisfaction. He instances the great increase since the transfer in signal stations, 630 to 1,200, and of voluntary observers, from 1,800 to 2,200. Plans have been agreed upon and undertaken with a view to enlarging and extending the work of the bureau, especially in aid of agricultural interests. He takes occasion to highly commend the selection by the President of Prof. Harrington as chief of the bureau.

He expresses a desire for closer cooperation between the various educational forces in the country for the advancement of practical agriculture, and urges that the slender thread connecting the department with the agricultural colleges and stations be strengthened, without in any way limiting the independent action of these institutions. He reports that Dr. Salmon, chief of the Bureau of Animal Industry, was assigned by him to represent the Department of Agriculture at two important international meetings, the congress of hygiene and demography in London, and the congress of agriculture at the Hague, Holland. He acknowledges the flattering evidence of consideration with which his representative was received.

#### ADULTERATION OF FOOD.

In reviewing the work of the Division of Chemistry with reference to the adulteration of foods, the Secretary emphasizes especially the adulterations of coffee, which are found to extend to a very large percentage, not only of the ground coffee, but of the coffee bean, wholly artificial coffee beans having been introduced into the market, of which

many samples bought on the open market were found to largely consist. These artificial beans are sold to the trade at four cents a pound. In large measure, they are imported, and the Secretary urges that such importations, as well as their manufacture and use in this country, be absolutely prohibited.

In concluding his report, Secretary Rusk states that from the time he assumed the reins of the office he devoted his attention to a general enlargement of the scope of the work of the department in the interest of practical agriculture, especially to the extension of the market for the disposal of the surplus of our great staple crops, including the cereals and our vast animal products and the enlargement of our productive capacity, so as to achieve the gradual substitution of home-grown for imported products, and to bring the department into such close relations with the farmers as would acquaint them with its work, inspire them with confidence in its ability to serve them, and forcibly impress upon the officers of the department themselves the wants and the condition of the tillers of the soil. These objects he believes to have been measurably attained, and further he is of the opinion that by steadily keeping them in view and extending and developing the means already adopted towards their accomplishment, we may reasonably entertain the hope of raising this department to a plane of usefulness commensurate with the fondest anticipation of all those who labored so long and earnestly to raise it to its present official dignity, and to extend its opportunities for valuable work.

He points out that to fully carry out his views will unquestionably involve liberal expenditure, but he says that within twenty years the efforts of this department on such lines as he has laid down will have increased the value of our annual agricultural products between three and four thousand million dollars to at least twice that enormous sum. "In the face of such stupendous figures," he adds, "which it needs no prophetic vision to clearly see, I submit that the largest sum necessary for the efficient carrying on of the work I have indicated will be comparatively insignificant."

#### LIVE STOCK AND DAIRY.

##### VALUE OF THE SILO.

1. It supplies the equivalent of green pasture during the winter.
2. When the corn crop is in danger of destruction by frost, the silo will enable the farmer to save it.
3. If a dry season shortens the hay crop, the silo is the salvation of the cattle.
4. Roots fail, or cannot well be grown from lack of labor; then the silo fills the bill.
5. At least a doubling of the capacity of the farm to carry stock is secured by using the silo.
6. It supplies green food when most needed by all stock; chickens, swine, sheep, cows and horses thrive on it.
7. Not itself a perfect food, it supplies the great bulk which all animals require in feeding.
8. It can be used successfully by

the common help on the farm, needing only strength to handle it.

9. Combining with meal, bran and all other rations, it can be fed with great advantage in fattening cattle.

10. Young cattle become extravagantly fond of silage and are as thrifty in winter as in summer because of the silo.

11. The silo keeps up the flow of rich milk in dairy cattle, requiring only a small addition of bran meal and a handful of hay.

12. With the above ration from the silo, "gilt edge" butter is produced in mid-winter.—*Southern Live Stock Journal.*

#### PEAS FOR DAIRY STOCK.

*Hoard's Dairyman* tell of the experience of Mr. James McPherson a very successful dairyman who took the advice of that paper last spring and sowed two acres of peas for feed for his cows. In talking with him the other day he stated that the only thing he regretted was that he had not planted a much larger amount than he did. Here is butter at 32 cents a pound and with pea meal, the finest butter feed in the world, he only had two acres to feed his forty cows, all fresh for winter dairying. He gave the following instructive points in his experience:

He took the advice to plant the peas deep and so sowed them broadcast on two acres of fall plowing and plowed them under four inches deep. Experience showed that the ground was rather too rich which prevented the vines from seeding as profusely as they otherwise would. He thinks he made a mistake in not harrowing and pulverizing the surface of the ground thoroughly before seeding, as that would have given the peas a better seed bed. After planting about a bushel of oats to the acre were sown and harrowed in over the peas for the purpose of holding them up when grown. Two bushels and a half of seed to the acre was the amount of peas sown of the variety known as the Canada field peas. When not ripe they were cut easily with the reaper, and as soon as dry stacked. The yield was twenty-five bushels to the acre, which is a good fair yield. Mr. McPherson says he shall plant more largely of peas next spring, shall select the earliest ground possible and plant early, so as to get a full start before hot weather sets in. He is growing peas for the same reason every other dairyman should grow them: to save buying bran, as a substitute, the best butter feed that can be had. A little calculation will show just how profitable it is to do this.

In order to keep the cow up to her best and most profitable work it is necessary to feed her the proper amount protein or nitrogenous food. In the books this element is generally termed "albuminoids." As a rule the farmer raises plenty of corn, which is fat producing food. But if the cow is fed corn alone, and no protein food, she gradually loses power as a milk and butter producer. She must have some food every day of a nerve and muscle supporting character in order to hold up in the work of reducing her other food, with this, to a butter result. Bran

is the most extensively used of all the protein foods for this purpose. But is getting very scarce and high priced. Liberal dairy farmers calculate to feed from 1,000 to 2,000 pounds per cow from Nov. 1 to May 15 if their cows are in winter milk. This is quite a heavy tax at present prices, even in Wisconsin, which is \$15.00 a ton, and prices going higher.

The bran of to-day, however, is greatly lessened in its feeding value by adulteration with dirt, mill dust and other material, so that it is evident to us, all things considered, that two pounds of pea meal is equivalent as a butter feed, of six pounds of ordinary bran. Those who have tried it, set it down as at least treble in value. Put the figure there and see how the peas will stand. Twenty-five bushels of peas to the acre is equivalent to 1,500 pounds of pea meal or 4,500 pounds of bran, the latter costing at present prices, \$33.75. Taking prices of bran where they stood last winter, at \$20.00 a ton here in Wisconsin, and the economy of raising peas in its place is still more apparent. With a well posted dairy farmer it is not a question whether he will feed bran or not. He knows he must feed it or some nerve and muscle supporting food if he expects his cows to hold up to their best and most profitable work.

Therefore in the light of these facts, and the high price of bran, the pea meal substitute is a necessity, if the dairy farmer expects to produce milk at a profit and maintain the strength and vigor of his herd. Here is a field of economy worth thinking about. We want the dairy farmers who read the DAIRYMAN to set seriously at work to study up this pea growing question. Peas can be successfully grown if the farmer will once learn how. Three things are imperatively necessary,

1. Thorough tilth of the soil with the ground not too rich.

2. Plenty of seed ranging from two bushels per acre for the smallest varieties up to three bushels for the larger Marrow fat peas.

3. Deep covering; not less than four inches. The pea is a deep rooting plant, and unless deeply planted will dry out with the heat of the sun before it fruits fairly.

#### WARTS ON COWS TEATS.

Removal with the knife or curved scissors is to be preferred when the base of the wart is broad, and it is important that the entire wart should be taken off, as if any of it is left it will grow again. It is adviseable in such cases to touch the base of the wart with a red-hot iron, as that will prevent its reproduction. Caustics are sometimes employed to remove warts, but they should only be used on small ones and when they are in situations where it is not convenient to use the knife or scissors. Nitric acid may be used for this purpose, a piece of flat stick being first dipped in the acid and then applied to the wart. Care must be exercised so as not to allow the acid to drop on sound portions of the skin. A wart with a narrow pedicle (stalk) may be removed by tying a waxed cord tightly around it, after which it will drop off in four or five days. —Munday.

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## BUSINESS REVIEW.

R. G. Dun & Co., in their weekly review of trade, say:

Reports from all parts of the country show that business, though interrupted somewhat by the elections, has been healthy and large in volume. At Boston the failure of the Maverick bank caused some uneasiness, but business continues steady and healthy. No lack of confidence is seen and money is easy.

At Cincinnati groceries improve, the hat trade is good and money fairly easy, while at Cleveland the outlook is good and the demand of money equals the supply. At Detroit trade is healthy without inflation and the demand for money moderate.

Western reports will show the effects of a phenomenal grain movement. At Chicago receipts of wheat and rye are three times last year's; the increase in dressed beef is 100 per cent. in oats, hides and wool 33 per cent and in flour 21 per cent, while a decrease of a third appears in corn, a quarter in barley, one-half in cured meats, some decrease in cheese, butter and cattle, while lard receipts are but a quarter of last year's. Sales of dry goods, clothing and shoes are largely in excess of last year and money is in fair demand.

At Milwaukee trade is good, with confidence in all branches and money quite easy.

At Minneapolis the lumber trade is closing well at stiff prices, and the output of flour is 299,000 barrels, against 180,000 last year, while the Duluth receipts of wheat in two months have exceeded those for the whole of last year.

At St. Louis increased distribu-

tion is observed, and exchanges in October were the largest by \$4,000,000 in any month in the history of the city.

At Kansas City trade keeps in good shape, at Omaha is active and at Denver improving.

At Memphis business is very fair; at New Orleans cotton receipts are heavy, sugar receipts liberal and rice steady; at Savannah trade is good at Atlanta in healthy condition, at Montgomery moderate, at Charleston brisk, with receipts of cotton, and at Jacksonville only fairly good. The only cities reported monitory pressure are Omaha and Savannah.

The iron industry, in spite of the lowest prices ever known for some products, shows no despondency and the demand for manufactured iron and steel does not diminish. The copper trade is just now unsettled, but tin is slightly stronger, though lead is lower at 4.1 cents.

Speculation has lifted wheat 14 cents, though the western receipts continue enormous. Exports for the week thus far are about equal to those of recent weeks. Corn has declined 1 cent, with somewhat increased receipts at the West, and cotton is 1 cent lower, with very heavy receipts at southern ports. Oil, pork products and hogs are somewhat lower, but coffee 1 cent higher. The general average of prices is a shade lower for the week and the markets are less embarrassed than usual by cliques maintaining artificial prices.

In the main labor is well employed, with few controversies about wages, throughout the country collections seem to be far for the season and on the whole gradually improving.

The business failures occurring throughout the country during the last seven days number 266, as compared with a total of 255 last week. For the corresponding week of last year the figures were 215.

## A FARM WORKSHOP.

Winter time is always looked forward to on the farm as a period of rest, and in a measure it should be so. In this latitude the duties of the agriculturist from April to November are arduous, and naturally the physical system needs a period of relaxation for a few months of the year. No one but the most shiftless farmer would think of courting absolute idleness during the Winter, and many are kept comparatively busy during most of the time.

Doing Winter chores is not as laborious as the heavy work of summer, but it is confining, and requires one's attention the greater part of the time. Especially is this true in regard to the care of milch cows, if any profit is expected to be derived from them, either during the Winter or the following Summer.

A workshop on every farm indispensable for the Winter months. Any warm, substantial out-building, or even an addition to the dwelling-house can, be utilized for this purpose. As neat and cosy a shop as I ever saw was in the wing of an old-fashioned New York manor house, occupied by a farmer of a scientific turn of mind. The workbench, while covered with tools for ordinary use, contained many instruments

usually only found in chemical laboratories. The walls were also adorned with large maps of the different sections of the United States and of foreign countries. With a wood stove emitting congenial warmth, this workshop was, as it should be, a pleasant Winter nook in which to pursue practical work of theoretical experiments.

How many pleasant, profitable hours may be passed by a farmer in the cloister of such a retreat, it being his own! First let him set aside or erect the building for the purpose, and then put in a workbench with vice attached, and what tools he is possessed of, and he has a beginning. As his interests become awakened and his necessities are more apparent, additional tools can be secured from time to time, as one gathers a valuable collection together. A good grindstone and an oilstone should be counted among the first necessities, to keep the edged tools sharp. There is no use in taking the cross-cut saw to town every time it needs filing, for you can soon learn to sharpen the teeth as well as an expert. Place two thin boards the length of the saw in the vise, and place the saw, back down, between them. When the vise is tightened up the saw is in proper shape for filing. Always hold the file squarely against the tooth, holding it on an upward slant. Bring the tooth to a point, and do not file another stroke after this is accomplished. A patent gage should be used in determining the height of the rakers of drag teeth. These should be filed just as sharply as the cutting teeth, their original shape being kept, and they should be about one-sixteenth of an inch shorter than the cutting teeth.

Practice will soon make perfect in fitting a cross-cut saw, and cord wood may be cut from a third to a half faster, and much easier, with a sharp, true instrument. In the lumber woods, where much timber is cut, cross-cut saws are filed every day, one man being especially employed for that purpose. It is therefore considered far more economical to use up a saw by much filing, and have it do good work, than to wear ones muscle out in crowding it through the log at a slow-cutting pace.

The workshop once established will become useful in numberless ways, and scarcely a day will pass when the farmer will not need to occupy it in doing some repairing. I have seen some very creditable sleighs for heavy work made by home talent in these farm shops, and last Winter I saw a nice buggy, including box and running gear, repainted in a shop of this description the work was accomplished in finished style by the farmer himself. With a shop on the farm fitted with tools, your boys after school hours will spend many profitable moments in amateur wood-work. The great problem is "How are we to keep the boys on the farm?" and we answer, by making the farm and its labors attractive. The feature we have mentioned would be one of the useful attractions, and for that, besides the other reasons, we recommend to all farmers its adoption.—Cor. American Cultivator.

## FARM MORTGAGES IN KANSAS.

Extra Census Bulletin No. 14, dated Oct. 28, 1891, is the authority for the following statement:

The mortgage indebtedness of Kansas aggregates \$235,485,000 or 14.3 per cent of the true value of all property taxed and not taxed. Of this indebtedness, 29 per cent rests upon city and village land, leaving the relation of mortgaged farms to the true value of all property but 10 per cent. The mortgaged farms represent but 58 per cent of the total number of taxed acres in the state, and the mortgage debt upon farms but 28 per cent of estimated true value of all taxed acres. Farm mortgages comprise 71 per cent of the total mortgage debt. Still more favorable to the condition of the state as a whole is the fact that 34 per cent of the mortgage indebtedness on farms is on real estate in the western half of the state, where values are low and where settlement was made a few years ago, largely upon public land. The debt upon farms is 48 per cent of the value of the mortgaged farms, the average debt per mortgaged acre being \$6.65. The average mortgage covers 130 acres, valued at \$1,798. The circumstances under which the debt has been incurred reflect credit rather than dishonor upon the givers of the mortgages. More than half the existing mortgage debt was incurred between 1885 and 1889 inclusive, and fully three-fourths for purchases and improvements. Such was the activity of that "boom" period in Western Kansas that the recorded indebtedness of the state was reduced 42 per cent from 1887 to 1889. How the debt grew and then how rapidly it diminished is shown in these figures: In 1880, the mortgages recorded amounted to 18 million dollars; this increased steadily until 1887, when the amount recorded was 97 millions; there was a decline to about 70 million in 1888, and to 56 millions in 1889.

Ten per cent interest was paid on more than one-fourth of the total number of mortgages from 1880-9; 8 per cent by an equal number, the others being mostly 7 to 9 per cent. More than one third of the mortgages were for \$500 to \$1000. The average life of a mortgage in Kansas is 3½ years, of a farm mortgage, 3 4-5 years, and of a mortgage on city or village lots, 2½ years.

## THE CHRYSANTHEMUM SHOW.

The Gardener's Club of this city, met with a marked success in its second annual Chrysanthemum show held at the 5th, Regiment Armory on Nov. 10-13. The general display was large and handsome; the individual exhibits of the highest quality, and the attendance was large. The financial results were entirely satisfactory. Amongst the popular prize takers were Messrs. Halliday Bros., Wm. Fraser, Henry Bauer, John Donn, S. Feast & Sons, Isaac H. Moss, Henry Frederick, John Medey, Chas. M. Wagner.

## THE POULTRY YARD.

## DOES IT PAY TO FEED MEAT?

Meat would be more generally used but for the difficulty in procuring it. What is meant is that from the butcher. True, there are such materials as ground meat, animal food, etc., which can always be used with advantage, and which are well worth the price asked for them, but meat from the butcher is better than meat in any other form, the only objection to its use, as stated, being the price.

In judging of the price of any article, however, one must be guided by the results obtained from it. A lot of food costing \$1.00 which gives eggs to the value of \$2.00, is cheaper than food costing fifty cents that produces eggs to the value of \$1.00. There are periods when the hens do not lay all, and any food that will induce them to lay will be really cheap compared with food that gives no result at all. We know of a period when eggs were so scarce that they readily sold for sixty cents a dozen. Only one person in that neighborhood was selling eggs, and he was feeding beef, which was procured for the purpose at fifteen cents a pound. It was a high price for beef, but eggs were also high, and the advantage overbalanced the cost and gave a profit.

It is estimated that one pound of lean beef is sufficient for sixteen hens one day. At sixteen cents per pound it is just one cent a day for each hen. At thirty-two cents per dozen six eggs from the sixteen hens will pay for the beef. It is true that "circumstances alter cases," and the hens may not lay at all, etc., yet the use of the meat will give more eggs than without its use. Warm quarters in winter, and the use of a variety of food, as well as judicious management, are all to be considered, but we believe that if experiments be made in feeding meat when eggs are high it will give a profit. It may be stated that the scraps or refuse portions of meat, which can be procured at a lower sum, will answer, but the mean should be lean and not fat, as it is the nitrogenous food that is being sought in meat.

It may also be mentioned that much of the ground meat and animal meal sold for poultry is excellent on account of containing bone as well as meat, and such foods may be used to cheapen the meat from the butcher, by alternating with it, allowing one kind one day and another the next.

## WHEN THE SNOW COMES.

The most trying period in keeping poultry is when the snow covers the ground and the hens are bound up in the poultry house. Such times are as trying to the hens as to the owner, for they are crowded together, lack exercise, suffer from confinement and lose appetite. Nor does the difficulty cease, when the snow melts, as mud and slush are encountered, and the yard is unfit for occupancy, while the poultry house is rendered damp and uncomfortable by the water carried in on the feet and legs of the fowls. To clean the poultry house during the time snow is on the ground is to work in filth

and mud, to say nothing of compelling the fowls to go outside until the job is finished. The feeding and watering of the fowls is also a matter that is disagreeable, and, on the whole one feels as if the keeping of poultry was anything but pleasant at such periods.

Much of this disagreeable work is due to lack of precaution at the proper time. The fowls should not be crowded. If the poultry house is small, keep fewer hens. More eggs will be secured from a few hens, properly kept, than from a larger number that may lack room or care. Keep the floor well littered with leaves or cut straw, and have plenty of light. When the snow comes, the first thing to do is to shovel away that which is front of the door. If a space only one yard square is cleared off it will give the hens a chance to come outside occasionally, but is better to clear off quite a space, and then sprinkle coal ashes on the cleared space. When the snow begins to thaw, see that the drains are open and the water flows off as fast as the snow melts. If the hens have a cleared space they will not go into the snow and less moisture will be carried into the house.

During a snow storm feed the fowls in house, and place drinking water inside also. As soon as all the hens have eaten remove the trough, or any food that may be left. Tempt them to busy themselves in the leaves or litter, by scattering wheat or millet seed in the litter. If the weather is cold, give them an extra allowance of corn, and see that every crack and crevice is closed.—*Mirror.*

## GETTING EGGS IN WINTER.

Let me give my experience for the first six months of this year, which will be about the same as last year. We started with nineteen hens, all of 1890 hatch; that is, all young dark Brahmans, and eight B. Plymouth Rocks. The size of the runs was 25x50 feet; size of each house 8x8 feet, built of common hemlock sheathing boards, neither lined or covered with anything, and in some cracks you could poke your fingers through. From January 1st 1891, to July 1st, 1891, we got from the nineteen hens, over 2,200 eggs, January, February and March being the heaviest months, and the Brahmans laying the largest proportion of eggs. Our feed was varied as much as possible, but over half was wheat, mill feed and bran, some ground oats, and very little corn, hens scraps, and plenty of ground meat, which we bought by the barrel, "or at least bought a barrel full of it." We feed a warm mess nearly every morning, gave plenty of water, and *oyster shells none*, but have not had a soft shelled egg once a year on an average, but have found that a very fat hen won't lay. We try to keep our hens in good condition, but not fat. They never get outside of their runs. If we find they are getting fat we cut down their fat by giving less food.

We get eggs all the year round. We will average, for own use in the house, about two and a half dozen eggs per week, which we make no account, but buy feed from the money of the eggs sold, and in the six months we had over twenty

dollars in cash clear, and above cost of feed for hens and chicks. Do you consider this a good average laying? At least half the days of January, February and March we would get nineteen eggs per day, every hen laying, and we sell eggs to our neighbors at forty cents per dozen, and they having more hens than we, and not getting an egg.—*Cor. Poultry Keeper.*

## HOME DEPARTMENT.

## PICKING UP DROPPED STITCHES.

There are no class of duties so hard to deal with as those which have been allowed to escape into the past. They hang like a millstone about one's neck, until they are done and yet we find all sorts of difficulties in the way of taking up and dealing with them.

Procrastination steals away with time and courage, leaving us in a moral quagmire from which we only escape, if at all, by almost super-human effort.

It behoves us, therefore, to gather up the dropped stitches with as little delay as possible if we would hope to keep our life-work going, even though it may cost some effort and a good deal of self-denial for the purpose.

Acting upon this principle, I take up my pen again and my place among the sisterhood of the Home Department of *THE FARMER*. Only those who have had their time and attention forcibly kept in other channels for long weary months know how hard it is to come back to doing exactly what one likes to do. It is as if one were escaping from some other calls, and every sound catches the ear and keeps one questioning as to whether or not something else is waiting to be done. Doubtless other members have had similar experience, and it is to be hoped they will shake off the shackles as speedily as possible and answer to roll-call, now that the working season is again upon us.

What has the summer done for us, or rather what have we done with the summer? Into each of our lives there has doubtless entered something that will affect one's present and future, whether we are conscious of it or not. Whether our experience have been happy or sad, it depends upon the manner of our acceptance to make them contribute to the building up of character, and making us more ready for action in any worthy purpose. We will hope that each one of us is therefore better equipped for rendering ready and valuable assistance to each other than we were this time last year, and that we shall stand by each other, and by *THE FARMER* faithfully, as long as there is anything to be learned in the home-making line, or any assistance we can offer those house keepers who come here for it.

CERES.

A STRANGER'S letters put me to wondering what of Augusta she lives in. Surely her mingling with the Southern people has been quite different from ours. Here a great many of the houses that I know are occupied by Southern people, look like they are washed outside and inside every day, and I have never seen cleaner

or greener yards or more beautiful roses in the yards than are here. As for the Southern girls—well I do not blame Northern men for falling in love with them. Northern girls cannot surpass these happy birds of our South land" (ask Barkis what he thinks on the subject) and if the girls are nice—why the rest has to be! Surely a stranger must know some one in her parts, who brushes her front yard, and does not stand in need of missionary work.

Come, friends, it is time we were getting together in business form again I do not think we have found all there is to do yet. Let us see if we cannot help each other in getting ready for Christmas. Our girls are beginning to discuss ways and means, particularly the means. How shall we be able to make the means a little more abundant. And what shall we do with what we have? And what can we do in way of getting up fun? Do, all hands, come out on December, 1st and

TRY AGAIN.

SALLY LUNN wants some advice about nut trees to be planted in latitude 36° longitude 77° that is about the centre of Bertie county, N. C. In this locality I would advise her to plant the large paper shell pecan; the so-called English walnut or Madeira nut; the Japanese Chestnuts and the Japanese Walnut. The Pecans will be the longest getting into bearing, and in my opinion, will not pay as well as the English Walnut. The Japan Chestnut bears at three years from the seed, when about as high as one's head. The Japan walnut looks like the English walnut but is smaller and is said to bear early and heavily. I would advise Sally Lunn to do as I did last Spring, send to H. H. Berger & Co., the well known seedsmen and importers of Japanese seeds and plants and get fresh seeds of Japan Chestnuts and Walnut. By the by, H. H. Berger is a lady although a large seedman and importer. She can get trees of the Pecans and English walnuts from P. J. Berckmans, Augusta, Ga. Glad to know where Sally Lunn lives, it is a good country, but she need not plant many cocoa nut palms there.

TOTHER HALF.

I have been ill of fever, but I have come back to life; but that life is so feeble it may go out any moment. I try to write this, that you may know I am with you all in spirit. Tell the club of my illness, and why I cannot write; ask them to pray the Master that I may yet be spared. The fever was caused by filth near me, so great that I had no power to resist. All hygienic remedies failed, and, to check fever poison had to antidote, hence this weakness. With all tender regards,

A STRANGER.  
Sand Hill, Augusta, Ga.

## HINTS AND HELPS.

## THE SEWING-ROOM.

A sewing-room need not be large. Indeed a small room is better, for it keeps the tools and materials of the sewer easily at hand. In city houses the hall bedroom is an excellent one for such a use, and if it be on the north side of the house, so much the

better. The north light is the best to sew by, and the room will be cooler for summer tasks. A furnace will keep the room warm in winter, and if stove heat is all that can be had, the small room is easily warmed from an adjoining one. The dressmaker who makes periodical visits to the ordinary home likes a room to herself, and the family aversion to her presence is lessened if she herself is not immediately visible.

The floor should be a bare one, stained or painted, or—the nearest approach to such—covered with matting or oil-cloth. Threads, bits of cloth, and the lint and dust from renovating old garments cling to wool carpets, and make a sewing-room one of the hardest to sweep. To brush up such litter and then wipe the floor with a dampened mop is a short, easy task. The curtain should be merely a shade, but capable of rising to the window's full height, that all the light may have free entrance. During the winter a long curtain of Canton flannel may be hung on a rod over the shade, so that the north wind cannot come whistling in at the loose window if the mending-basket calls the housewife there evenings. Such a curtain should reach the floor, and in plain colors, or figured patterns alike on both sides, will cost from 15 to 25 cents per yard.

A low rocking-chair is the easiest to sew in, and it may be of rattan, wicker, or wood, as the buyer may fancy. Rattan is the most costly, and while the American rattanwork is finer, the chairs are not so well shaped as those of Chinese or English workmanship. Chinese chairs are usually a mixture of rattan and wicker. A rattan chair may cost from \$5 to \$10, while a comfortable wicker chair may be had for \$3. A rush bottomed, hardwood rocking-chair without arms, such as have so long been popular on piazzas, makes a cheap, excellent sewing-chair. Cushions of feathers, or even excelsior, covered with chintz, cretonne, or denim, for the seat and back make it quite luxurious, and are easy matters of home manufacture. This denim is an old friend under a new name. It is really bed-ticking, but is woven trifle finer out of respect to the decorative uses to which it is now put. It comes in plain dull blue, plain brown, blue and white, and brown and white striped, and is firmness itself in texture.

An ordinary chamber chair is also necessary, to use when working at the table. Much cutting and basting can be done at a table, and quite as easily as if the worker is seated. The table, which may be a discarded one from the dining room, should be lower, perhaps two inches, than a dining-table, that the sewer may not be fatigued by having to hold up her arms while working. This table should be at least three feet wide and four or five feet long—a size well adapted to cutting out cloth of differing widths, and casters should also be supplied to move the table easily. Small cutting tables come with folding legs, so they can be "reduced to lowest terms," and occupy little space when not in use. They are virtually standing lap-boards. The cost from \$2 to \$2 50 and are made of narrow strips of light and dark wood, one strip be-

ing marked off in inches and fractions like a tape measure. Regular lap-boards come made of similar strips of hardwood, and cost \$1 50. They are durable, but heavy to hold, and for that reason one of paper or felt is an improvement. Such are of light weight, are metal-bound, to keep them from warping, and they cost less than a dollar.

Besides the sewing-machine, whose use is almost universal, a well-equipped sewing room needs a scrap basket, a rag bag, piece-and pattern bags, a chest of drawers, and lastly, a hassock or footstool.

In no other room in the house is it wise to attempt home carpentry but articles of general utility and comfort made for this room do not get the severe strain on their weak joints that things for every day household wear receive at the hands of the family. The scrap basket is one such. It can be made of a discarded peach basket, tea-chest, or other box, provided it is firm and unbroken in the start. Cover the basket inside and out with cretonne or denim. Line the tea chest or box with paper or cloth, carefully pasted in, and exercise your dexterity in either case in fastening on the outer flouncing, and you will have a receptacle for scraps just as useful as a \$3 one of good basketwork, and fully as durable as a cheaper reed or splint one. Even an empty butter firkin, dried, cleaned, and painted inside and out, will be well disposed of if finished its career as a scrap box.

Bags for patterns, pieces of clothes and rags should be made of denim or strong cretonne, calico and gingham not being strong enough. The sewing room can be made to look neat if the housekeeper is able to make these, her chair cushions, and box coverings all of one kind of cloth, matching the prevailing color of her heavy winter curtains. One yard deep and three quarters of a yard wide is a good size for piece and rag bags, while pattern bags should be half as large. Two bags are better than one for pieces of the family clothing—one for woollens and the other for cotton—and they should be hung in the sewing-room rather than in a closet, where it is troublesome to get to them, and where they crowd clothing. One rag bag is enough.

A footstool can easily be contrived from a small wooden box, and covered to match the scrap basket, if one does not wish to buy a hassock. An old fashioned chest of drawers or an unused bureau is a necessity to the orderliness of the sewing-room. New materials and garments already cut out will fill one drawer. Garments in process of making and old ones for remaking and mending can be put in another; while the yarns and cotton for mending, the small basket or work-box, with its needles, threads, and scissors, can be conveniently placed in yet another drawer. Here, too, will be the labelled boxes of extras, threads, braids, tapes, buttons, and countless little trifles so often needed. A small well covered board to do pressing on, needed by every capable sewer, and its companion, the holder for the iron, should also find a resting place in a drawer. A flat-iron stand can also be added, while a one-burner oil or gas stove standing on the top of the chest will provide the worker with every needful tool ready to her hand. c.

#### NOTHINGS.

AFTER broiling meats and fish, tomato, etc., dip in boiling water and then butter them.

**STRAIGHTEN** and stiffen old whale bone by soaking in hot water.

**SAVE** all nuts that you gather to take kernels from and pound into nut flour to be used in macaroons instead of almonds.

**USE** clam mussel or oyster shells on top of hot coals to clean off the fire brick. When the fire has gone down the clinkers will be melted off.

**TAKE** skins off beans before baking them, by boiling half an hour, then wash skins off in cold water.

**SAVE** pretty mussel shells, those with mother of pearl linings, for fancy boxes. Paste velvet on the backs and tie with ribbon for hinges and clasps.

**INSTEAD** of buying gelatine and fancy sugars for colored jellies, make green jelly of green grapes, measure your sugar, heat it to boiling with a little grape juice extracted from grapes by boiling until soft, a large quantity. Then add your juice that has dripped out, not squeezed.

P. C.

#### FOR MOTHERS.

##### THE HOME END OF THE TEMPERANCE QUESTION.

Boys are—well, boys are boys. They are at once our chief delight and our greatest anxiety. We rejoice when a man child is born, and for a brief space our satisfaction and enjoyment are consummate. But when the dimpling, fascinating darling begins to develop into the sturdy wifful boy, the awful consciousness and personal responsibility of the future are brought home to us. What shall we do with this soul committed to our care? It is well for the parents who keep asking themselves this question and who do not grow tired, indifferent or desperate as the years go on, for it is only by constant vigilance that the average boy can be taken to a safe and healthy moral and physical manhood. The exceptional boy is so well equipped by birth that the omission of the ordinary processes seems to have very little influence upon his character. He would grow to a splendid manhood under the most poverty-stricken and untoward circumstances. The more binding and complicated the environment, the higher will his royal soul rise in the effort to enlarge and simplify it. These are the saviors of the race but they are exceedingly rare. There is still another exception—the boy upon whose character neither love nor the discipline of love has the slightest effect. He is selfish, tyrannical, dishonest, and ultimately breaks his mother's heart. He drifts to the grog-shops or the gaming-table, and nine times out of ten dies as he has lived.

Many of our foremost thinkers believe that the actual number of those who could not have been saved by proper home training is very small, and that upon the mothers of this generation rests the re-

sponsibility of temperance and other reforms. Even the most radical of our brilliant men and women who fighting inch by inch for prohibition and for universal suffrage admit that home influence is the strongest, both for good and for bad of any known to men.

The average boy is a social, though not always a domestic animal. He loves light and warmth and is never quite satisfied "unless something is going on." This restlessness is usually considered by parents a bad sign. "John is never still," they say; "he is enough to drive one crazy with his noise and his perpetual questions and demands. He never enters a room that he doesn't upset, although the gratification of his keenest desire lasts but a moment. It is impossible to satisfy him."

That is the boy, the growing, fast-developing boy, and although this condition may annoy and perplex the busy and nervous mother, it is just as healthful as the evolution of the boy from the baby. The tendency of mothers is to repress the activity and suppress the noise. But unless they can find something that will interest the youngster while he is keeping still, they are making a great mistake. This natural steam, naturally generated, must find vent somewhere and somehow, and it is true that upon the mother devolves most of the responsibility for providing proper safety-valves for the escape of this teeming and wondrous energy. The father at home mornings, evenings, and Sundays, and not always then, has very little opportunity to assist in the training of his children. The wise mother, knowing how superficial and unsatisfactory any detailed account of her experiences and anxieties must necessarily be, keeps her own counsel. The disobedience of the morning may have been repented of before evening, and the relations of love and peace re-established. So of what use to speak of a trouble past? And then the allowances for peculiar circumstances and aggravations, which the mother feels ought to be made, would scarcely be considered by the father who was not on the spot to see just how the unpleasant scene was brought about. So it is true that the mothers of the race are compelled to be chiefly responsible for the proper education and well-being of their children. It is impossible to divide this care, though it may be, as it too often is, cruelly shirked and ignored.

The logic of this situation certainly seems unanswerable. If mothers are in such a large measure accountable for the moral health of their boys, then the deduction is fair that upon them rests, if not the final solution of the temperance question, at least so great an approximation to it that the rest of the work can be easily accomplished by friends of decency and sobriety outside the family circle.

"Talk was never known to keep a young man out of a liquor saloon yet," said Abraham Lincoln, when he was asked to lecture on the subject. "If there is more attraction, more warmth, more light, more good fellowship, more liberty, in the liquor saloon than there is at home, that is where some young men will go, and all the orators and special

pleaders in the world cannot hinder it."

This is tragically true, and Mr. Lincoln might have added that, after a certain point in the history of character has been reached, not all the love that a mother can lavish on her child will avail to turn him from his evil ways. Her tears make no impression, her anguish is ignored. She may drag out her weary days and nights in fruitless endeavor to win his affection. It is too late. The time for that was years ago, when she saw no danger, or indifferently allowed things to take their course. The time for this was when the boyish will first began to assert itself, and upon the initial exhibitions of intellectual restlessness. Then perhaps she said impatiently, "Oh, do stop your noise! If you don't behave I will shut you up in the closet," or maybe in her weariness or ill temper, she gave him a blow. Perhaps she punished him severely for an accident or an inattention. Boys are always inattentive when there is something more interesting going on than the work they are engaged in. This is not a fault. It is the reaching out of the spirit toward everything that promises joy and refreshment, and needs only to be properly led. One delightful thing about the perfected kindergarten system is the way in which a child's attention is secured. If the thought is divided from the matter in hand, then the new subject is immediately taken up and explained in the most interesting manner, thus making the education fit the child and not the child fit the education.

In the matter of training boys there should be no cast-iron rules, and as few things as possible should be forbidden them.

The soul of the boy hankers after the unattainable, and this proves neither his total depravity nor his moral weakness, but the native ambition which every day is being strengthened or weakened by the wisdom or the unwisdom of the home training.—*Eleanor Kirk, in Christian Union.*

#### MEMORIAL.

At the regular quarterly meeting of Montgomery County Grange No. 7 held at Barnesville on the 29th of October the following action was taken.

*Resolved*, That in the death of Brother John T. DeSellum, we recognise a Father's voice calling home a dutiful son, and we bow in filial submission to His will.

*Resolved* That Montgomery county Grange, No. 7 feels deeply her loss in the death of Brother DeSellum, who has been her Worthy Treasurer since the organization of this Pomona Grange; and who has proved a most faithful and efficient officer in all the work assigned to him; heartily maintaining her principles, purposes, both by precept and example.

*Resolved*, That we extend our heartfelt sympathy and condolence to all the other personal friends of Brother DeSellum.

*Resolved*, That these resolutions be published in our county papers and in THE AMERICAN FARMER.

*Resolved*, That this Grange now adjourns out of respect to his mem-

ory, without transacting further business.

ISAAC YOUNG,  
JOHN W. BROWN,  
C. R. HARTSHORNE,

Committee.

#### OUR BOYS AND GIRLS.

##### SOME NOVEMBER HAPPENINGS.

On November 9, 1620, the weary wave tossed pilgrims on board the brave little Mayflower caught their first glimpse of the New England coast. A year later Governor Bradford issued the first Thanksgiving Proclamation, this instituting a festival which, after being confined for more than two hundred years to New England, at length became national in its character, and is now observed on the last Thursday of each November throughout the length and breadth of our land.

Another of our national days, that on which we honor the memories of those who died for their country's sake was also first observed in November. Although Memorial Day now comes on the 30th of May, the first visiting and decoration of our soldiers' grave was on the occasion of the dedication of the National Cemetery at Gettysburg in November, 1863. In the same month of the same year were fought the terrible battles of Missionary Ridge and Lookout Mountain ("the battle above the clouds") just outside of Chattanooga. At the same time the siege of Knoxville was in progress and the month was filled with events of thrilling interest from its first day to its last.

In one sad November during the Revolution the American army was driven from its last stronghold in the vicinity of New York city, while a joyous November seven years later witnessed the evacuation by British troops of the same city, now become their last stronghold in the land they had hoped to conquer.

All the Young People readers in Ohio and Washington should know and remember that their States were admitted to the Union in November though the former is eighty seven years older as a State than the one that only came in two years ago.

In this month, nineteen years ago, the city of Boston was the scene of a conflagration so terrible that it burned over sixty acres of massive stone, brick, and iron buildings in the very business heart of the community, and destroyed \$70,000,000 of property before its awful fury was stayed.

A most notable November in our history was that one in 1765, the first day of which was observed throughout the thirteen colonies as a period of mourning on account of the going into effect of the hated Stamp Act. It increased the burden of taxation upon those who had no voice in their own government, and aroused them to such a sense of injustice that ten years later they rebelled, and the war of the Revolution was begun.

On the first day of November, therefore, the church bells were solemnly tolled, flags floated at half-mast, and business was everywhere suspended. All over the land such men as Samuel Adams, Patrick Henry, James Otis, and John Adams addressed patriotic speeches to throngs of their country-

men, and fired their hearts with thoughts of a glorious independence.

The November of 1861 will ever be famous in our political history because in that month for the first and only time, two presidents were elected within these United States—Abraham Lincoln to rule in Washington, and Jefferson Davis in Richmond.

To our neighbors across the Rio Grande November is as dear a month as July is to us, for on its sixth day, in 1813, the Mexicans proclaimed their independence of the crown of Spain, and formed the second greatest republic of the Western hemisphere.—*Harper's Young People.*

**NOTICE.**—Reports received from the young folks in response to the offer made in this column of THE FARMER, in the June 1st number, to those who would submit statements of their methods of saving money, will appear in the next issue (December 1), and the awards will be announced in the following one (December 15).

#### HOW TONY SOLD ROSE-BUDS.

He was only a dog, but a remarkably clever one. He belonged to the class known as shepherd dogs, which are noted for their sagacity and fidelity. His master was a little Italian boy called Beppo, who earned his living by selling flowers on the street.

Tony was very fond of Beppo, who had been his master ever since he was a puppy, and Beppo had never failed to share his crust with his good dog. Now Tony had grown to be a large strong dog, and took as much care of Beppo as Beppo did of him. Often, while standing on the corner with his basket on his arm, waiting for a customer, Beppo would feel inclined to cry from very loneliness; but Tony seemed to know when the "blues" came, and would lick his master's hand, as much as to say: "You've got me for a friend. Cheer up! I'm better than no-body; I'll stand by you."

But one day it happened that when the other boys who shared the dark cellar home with Beppo went out early in the morning as usual, Beppo was so ill that he could hardly lift his head from the straw on which he slept. He felt that he would be unable to sell flowers that day. What to do he did not know. Tony did his best to comfort him; but the tears would gather in his eyes, and it with the greatest difficulty that he at forced himself to get up and go the florist, who lived near by, for the usual supply of buds.

Having filled his basket, the boy went home again, and tied it around Tony's neck. Then he looked at the dog, and said: "Now, Tony, you're the only fellow I've got to depend on. Go and sell my flowers for me, and bring the money home safe, and don't let any one steal anything." Then he kissed the dog, and pointed to the door.

Tony trotted out in the street to Beppo's usual corner, where he took his stand. Beppo's customers soon saw how matters stood, and chose their flowers, and put their money into the tin cup in the centre of the

basket. New and then, when a rude boy would come along and try to snatch a flower from the basket, Tony would growl fiercely and drive him away.

So that day went safely by, and at night-fall Tony went home to his master, who was waiting anxiously to see him, and gave him a hearty welcome. Beppo untied the basket and looked in the cup, and I should not wonder if he found more money in it than he ever did before.

This is how Tony sold the rose-buds, and he did it so well that Beppo never tires of telling about it.—*Harper's Young People.*

#### BLACKBERRIES.

It is to be greatly lamented, yet must, I fear, be recognized as a fact, that the trend of this most important member of the small fruit family leads to retrograde. Of the new varieties there are very few that are peers of the Kittatinny, Lawton or Wilson in their palmy days.

Early King is a variety that, however, seems to possess much merit as an early sort, especially for the home garden. In size it is about medium, larger than Snyder, Taylor's Pacific, etc., but smaller than the Wilson. It lacks firmness for long shipment, but is of superior quality and is very hardy. Cane of moderate growth and quite, although not especially, prolific, giving us our first blackberries. It ripens with the Lucretia dewberry and in advance of Early Harvest. It seems strange to me that a variety so desirable in many ways should be so long in becoming popular. I have now had it in bearing at least half a dozen years.

Thompson's Early Mammoth, evidently, is a seedling of Wilson's Early, and very like it many ways. It is said to be much hardier. With me it has been entirely hardy. Owing to the mildness of the winter the Wilson has also been hardy during the same period.

Minnewaki has with me proved the best substitute for the Kittatinny since we can no longer successfully fruit that old favorite. The canes are of good growth, fairly prolific, healthy and hardy; berries of good to large size, firm, attractive and excellent. It has not proved especially early, ripening with Snyder and Kittatinny, or ten days after the Wilson.

Lovett's Best, as its name implies, is, taking all things into consideration, the most promising of the new varieties. I must not omit to speak of Childs' Everbearing tree blackberry, or Topsy. This I think a hybrid of *Rubus cuneifolius* by *Rubus villosus*, retaining the stout, upright cane and villainous spines of the former and the large fruit of the latter. On ordinarily fertile soil the canes attain a height of three to four feet, are erect, very strong and rigid. It branches freely and is densely covered with rather small foliage of a thick, leathery texture. I have never known it to be attacked by orange rust or any other diseases. It is exceedingly prolific, beginning to ripen late, or the first of August with me, and remaining in fruit from four to six weeks. The berries are of the largest size, rather soft and of good though not high quality.

it is not very hardy, its position being between Wilson and Lawton in this regard. In localities where the mercury does not fall below zero it possesses much value for the home garden, but I do not think it would prove profitable to the market grower anywhere, owing especially to its lateness in ripening.—*J. T. Lovett, before the Amer. Pomological Soc.*

## BRIEF NEWS SUMMARY.

**FOREIGN.**—Financial disaster is imminent at St. Petersburg.—An official report of Japan's earthquake states that 6,500 persons were killed.—President da Fouseca proclaimed himself dictator of Brazil. Some States have revolted, and internal war is imminent.—Chili is seeking a friendly solution of the difficulty with the United States.—Johann, the last archduke of Austria, was found in Chili.—Pope Leo's condition is considered serious.—The anti-Parnellite candidate was elected to succeed Parnell at Cork city, by a plurality of 1,518 votes.—There is great financial uneasiness in Europe.—Great excitement was occasioned in Berlin by heavy bank failure.—Admiral Jorge Moutt was chosen president of Chili.—President Harrison has been chosen arbitrator on the boundary line dispute between Brazil and Argentine Republic.—The committee of the French chamber of deputies agreed upon the duty on American salt meats fixed by the senate.—The difference in the Canadian cabinet have been settled.—There were many broken heads and great excitement at the Irish national federation meeting at Waterford.—By the suspension of a Berlin banking firm German aristocrats lost a large amount of money.—Two hundred persons perished in a fire at Hankow, China.—News of another revolution in Brazil was received.—Pope Leo is failing in strength.—The greatest storm in years raged in England, doing immense damage.

**GENERAL.**—Notices of intention to contest six congressional seats have been filed with the clerk of the house.—The New York presbytery dismissed charges of heresy against Dr. Briggs.—Secretary of war Procter resigned.—The Hawalline minister of finance arrived in the United States on a special mission.—A train was held up by four men in an Omaha suburb.—Minneapolis mills again broke the record on the flour output.—A report of the operation of the Spanish reciprocity treaty, showing great benefits, was issued.—A survey has established the fact that 1,200 square miles of Indiana belongs rightly to Ohio.—There is a coal famine at Chicago.—Cherokee Indians filed a petition for the allotment of their lands to the tribes of the Cherokee nation.—Alfred C. Hobbs, the famous lock picker, died.—The anti-lottery committee of Louisiana issued an appeal to the people of the United States.—Chicago anarchists celebrate in honor of the anarchists hanged four years ago.—The National bank at Corry, Pa., suspended.—Norman B. Monroe's fast yacht Norwood steam a mile in 2.12½.—Oberlin college girls captured a burglar.—Two blocks collapsed at Akron, O.—Six persons were killed and others injured by a mine explosion at Nanticoke, Pa.—Four men and thirty horses were suffocated by a Denver, Col., fire.—President Potter and Directors French and Dana of the Maverick National Bank, Boston, which closed its doors Nov. 2, were arrested on charge of embezzling \$1,100,000, \$600,000 and \$300,000 respectively. The bank's liabilities are \$8,000,000.

**THE ELECTIONS.**—Maryland elected Frank Brown, democrat governor by 30,000 majority and nearly the whole Legislature is democratic.—New York elected a democratic governor by 46,000; the legislature is very close. Ohio elected Major McKinley governor by 21,500, and a heavy majority of republicans in the Legislature. Massachusetts reelected Gov. Russell, democrat, by a reduced majority, and gave the rest of the state

ticket 8 to 12,000 republican majority. Pennsylvania went republican by 68,000. New Jersey is strongly democratic, as is Virginia, no colored man being elected to the Legislature, the first time since the war. Iowa reelected Gov. Bois, democratic, and the Legislature is divided. In Kansas the republicans made great gains. Michigan elected a republican congressman, a gain, and Nebraska and North Dakota went republican.

**MARYLAND.**—The Fifth Maryland Regiment made a trip to Raleigh, N. C., where it was warmly received. The presentment against Robert T. Banks, register of wills, for alleged overcharge in fees, was quashed by Judge Wright in the Criminal Court upon motion of State's Attorney Kerr.—Dr. T. Barton Brune died at his home, 1815 North Charles street, of typhoid fever.—Moncure Robinson the noted Virginia Engineer, founder of the Bay Line and father of John M. Robinson, of Baltimore, died in Philadelphia, aged ninety-one.

Isn't there a query department in the FARMER? Please make one for this:

Dye from walnut hulls, from oak bark, from poke berries, please tell how it is made.

Please tell how to plant peach seed. S. D.

## THE HORSE SHOW.

The seventh annual horse show of the National Horse Show Association is open in Madison Square Garden, New York. Out of 1,066 horses entered about 600 were on exhibition. A big annex in West Twenty-seventh street was almost filled with valuable horse flesh. Among the scores of noted animals on exhibition are Mr. Cassatt's Bard, the once unchallenged king of the turf; S. S. Howland's Arabian stallion Leopold; C. J. Hamlin's Mambrino King, "the handsomest horse in the world," Belle Hamlin; George Pepper's jumper Roseberry and Ontario. The exhibit of hackneys is unusually large. Among the exhibitors are such well-known breeders as A. J. Cassatt, Pierre Lorillard, Prescott Lawrence, John A. Logan, Jr., F. Pillsbury, J. B. Perkins and Henry Fairfax.

## BALTIMORE MARKETS—Nov. 16

**Flour.**—Steady. We quote Western Super selling at 3.50@3.75, Western Extra, 3.90@4.40, Western Family, 4.00@5.00, Baltimore High Grade Family—5.75, City Mills Super, 3.40@3.75 Rio Extra, 5.25@5.50, Rye flour, medium to choice 5.00@5.50, Hominy, per bbl, 5.75@—Cornmeal, per 100 lbs. 1.30@1.60 Buckwheat Meal, per 100 lbs. 2.00@2.40

**Wheat.**—Southern easy, with sales of Fults at 100@1.07 cts. and longberry at 102@1.07 cts. Western dull and easy. No 3 red spot sold at 104½ cts., January 107½ cts. May 112 cts.

**Corn.**—Southern easy, white selling at 53 a/c cts. and yellow at 51@57 cts. Western dull, mixed spot selling at 64 cts. January, February and March, 53 cts.

**Oats.**—Active. The quotations were: Ungraded Southern and Pennsylvania 37@39 cts., ungraded Western white 38@39½ cts., ungraded Western Mixed 37@38 cents. No. 2 No. 2 white 39@39½ cents. and No 2 mixed 37@38 cents per bushel.

**Rye.**—Easy. Quotations: No. 2, 103½ cents; fair to good, 87@88 cents, and common 80@85 cents per bushel.

**Hay and Straw.**—In good demand. Quotations as follows: choice timothy \$14; good to prime, \$13@18.50 mixed 11.50@12.50; fair to good timothy, 12.50@13.50; common and inferior \$9@10. Clover \$10@11; off-grade \$8.50@9.50, on track; prairie hay \$9.50@10.00. **Straw.**—Steady to firm. Rye in car-loads, at \$13.50@14 for large bales in sheaves; \$9.50@10.00 for blocks; wheat blocks \$7@8; oat blocks \$8@8.50. Short, chaffy wheat and oats about lower. At Scales, Hay—Timothy 1 1/2@15, Clover Hay \$11@18 per ton. Straw—Wheat 25, Rye 10@12, Oat 8@ per ton. Bar Corn 2.40@2.60 per bbl. New Corn 2.40@2.60.

**Mill Feed.**—Firm. We quote: Western bran, light 12@15 lbs., \$19.00@20.00; medium,

14@16 lbs., \$18.00@19.00; heavy, over 16 lbs., \$17.00@18.00; and middlings \$16.00@17.00, on track. City Mills middling, \$20 per ton delivered.

**Provisions.**—Steady, with a fair demand. We quote Sugar-pickled shoulders 7 cents; smoked sugar-cured shoulders 8 cents; sugar-cured breast 10c. Canvassed and uncanvassed hams, small average 11½ c.; for large averages 10½ c. per lb. Meats pork \$1.50 per bbl. Lard best refined, pure, 8 cents per lb.

**Butter.**—Firm. The quotations were: Fancy creamery Jobbing at 90 cents, good to choice creamery 22@27 cents per lb. Imitation creamery 25 cents per lb. Fancy ladie-packed 22@23 cents, prime to choice do. 17@18 cents per lb. Holland butter 18@20 cents. Store-packed 14@16 cents, and creamery Prints 31 cents per lb.

**Cheese.**—We quote Fancy full cream. New York State, 50 to 60 lbs. 10½@11 c. cents; New York flats, 30 to 35 lbs. size 11½@11½ cents per lb.; size 11½@12 cents per lb.

**Eggs.**—Strictly fresh laid were 26@27 cts. per dozen. Held and ice-house stock 20@23 cents per dozen.

**Poultry and Game.** Turkey ducks active Spring Chickens 11@12 cents per lb.; old Hens dull 9 cents per lb. and old Roosters 25@30 cents apiece. Ducks 9@10 cents per lb. Turkey 12 cents per lb. Geese \$1.50 per pair.

**Canned Goods.**—Fairly active. We quote two-pound Peaches, 80@85 cents; three-pound peaches 1.40@1.50; three-pound Peaches, seconds, 1.00@1.10; three-pound Pie Peaches, 75 cents; Tomatoes, 60@65 cents; three-pound Peaches, 75@77½ cents; two-pound Green Corn, 80 cents; two-pound String beans 55; Bartlett Pears, 1.00@1.10 cents per pound.

**Tobacco.**—New crop ground leaves sell close. Other grades scarce. We quote Maryland Inferior and frosted, per 100 lbs., \$14@15; sound common, 2.50@3.00; good common, 4@5; middling, 6@8; good to fine red, 9@11; fancy 12@13; upper country, 3@4@15; ground leaves, 1a@2.

**Wool.**—Draggy. The Quotations were: Unwashed 21@24 cents; tub-washed 30@33 cents, pulled 25@28 cents and Merino 14@18 cents per pound.

## LIVE STOCK

**Beef Cattle.**—Not active. We quote prices this week as follows: Best Beefees 4.25@4.35, those generally rated first quality 2.75@3.12, medium or good fair quality 2.75@3.37 and ordinary thin Steers, Oxen and Cows 2.00@2.25 per 100 lbs.

**Sheep and Lambs.**—There has been a fair trade for good Sheep and Lambs. We quote the range for Sheep at 3½@4½ cents, and a few extra 4½ cents per lb. gross. Lambs 3½@4½ cents per lb. gross.

**Swine.**—In a fair supply. Quotations range at 5½@6 cents, net; most sales at 5½@5½ cents.

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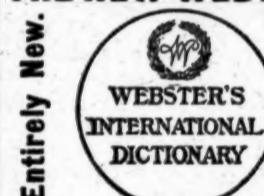
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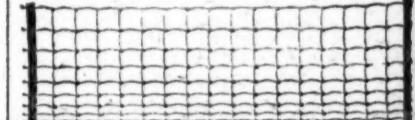
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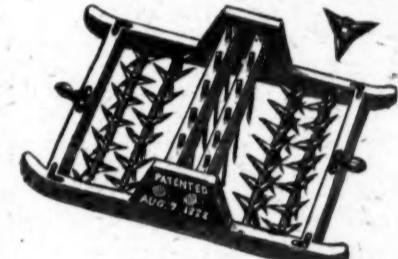
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